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Zoological Research

云南省米虾属一新种
(十足目：匙指虾科)

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摘要：报道了米虾属一新种——昆明米虾 *Caridina kunmingensis* Wang *et* Liang, sp.nov.。昆明米虾与石林米虾 *Caridina shilinica* Liang *et* Cai 2000 有相似之处，但前者额角较短，前两对步足腕节和螯短而粗，雄性第 1 腹肢内肢、雄附肢形态和结构均与后者不同。

关键词：匙指虾科；米虾属；新种
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已报道云南省虾类 33 种，隶属 2 科 6 属，其中米虾属 14 种(王忠泽等，2000；梁象秋，1989，1990；梁象秋和严生良，1985；梁象秋等，1984，1987；Cai & Dai，1999，Cai & Duan，1998；Cai & Liang，1999；Kemp，1923；Liang & Cai，1999；Yu，1938)。最近，在整理虾类标本时，发现于 1983 年夏天，采自昆明安宁温泉风景名胜区的米虾，为一新种，命名为昆明米虾 *Caridina kunmingensis* sp.nov.，现报道如下：

1 昆明米虾，新种 *Caridina kunmingensis* Wang *et* Liang, sp.nov.(图 1)

额角约伸至第 1 触角柄第 2 节的末端，少数稍稍超出，上缘平直，亦有末端稍向上扬起；上缘具 11~19 (多为 11~14) 齿，基部有 6~9 齿位于眼眶后缘的头胸甲上，末端多半有 1/3~1/2 无齿，亦有少数可分布至靠近末端；下缘具 2~7 齿，通常分布于下缘的末半。头胸甲的前侧角圆，无颊刺。

尾节背侧具有 5~6 对背侧刺，后端圆，末端中央背侧具一大而略呈三角形的短刺突。侧刺稍长于间刺。间刺 3~4 对，外间刺稍短。肛前脊末端无刺，顶端具刚毛丛。

第 1 触角柄刺长，约伸至或稍微超出基节的末端；基节长于末两节之和，第 2 节长于第 3 节。鳞片长约为宽的 3 倍。右大颚切齿突具 4 枚尖齿。第 1 颚足内肢的外末角圆，无角状突起。第 3 颚足末端约 1/4 超出第 1 触角柄的末端；末节长于末 2 节，末节末端 1/3 腹缘具 6~7 枚短刺，顶端爪状。

第 1 步足稍短，约伸至第 1 触角柄第 2 节的末端；腕节前缘凹陷，明显地长于长节，长约为宽的 1.6~1.8 倍，螯短于长节，长为宽的 2~2.1 倍，指节为掌长的 1.4~1.6 倍。第 2 步足较细长，约伸至第 1 触角柄的末端；腕节末端稍凹陷，稍短于长节，长为末端宽的 4~4.6 倍，螯短于腕节，长为宽的 2.3~2.6 倍，指节为掌部的 1.7~1.9 倍。第 3 步足特长，两性长度相似；掌节有一半左右超出第 1 触角柄的末端；长节为座节的 3.5~3.8 倍，为腕节的 1.5~1.9 倍，掌节长为末端宽的 8~9.6 倍，为指节的 2.6~3.7 倍，指节长为宽的 3.6~3.9 倍，腹缘具 6~7 刺。第 5 步足约伸至第 1 触角柄的末端；长节为座节的 3.3~3.4 倍，为腕节的 1.3~1.5 倍，掌节长为末端宽的 10~13.8 倍，为指节的 3.4~4.5 倍，指节长为宽的 3.5~4.0 倍，腹缘具 29~32 个疏状刺。

雄性第 1 腹肢内肢约伸至外肢的 2/3 左右，窄，略呈长卵圆形，基部稍膨突，宽于末端，内、外缘均具细长的刺，刺均由基部向末端依次变长，末端刺由内侧向外侧依次变长，以外末角的最长，外缘的基半部为刚毛刺，末半无刚毛；内附肢由内侧中部伸出，长，通常稍微超出内肢的末端，末端内侧具 4~5 个小钩。第 2 腹肢雄附肢略呈短棍状，

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约伸至内肢的2/3，由基部至末端均排列有粗大的刺，内缘的显著粗大，末端的稍短小；内附肢粗大而发达，由基部向内斜伸，末端亦具发达的小钩。尾肢外肢横缝前缘具10～12个活动刺。

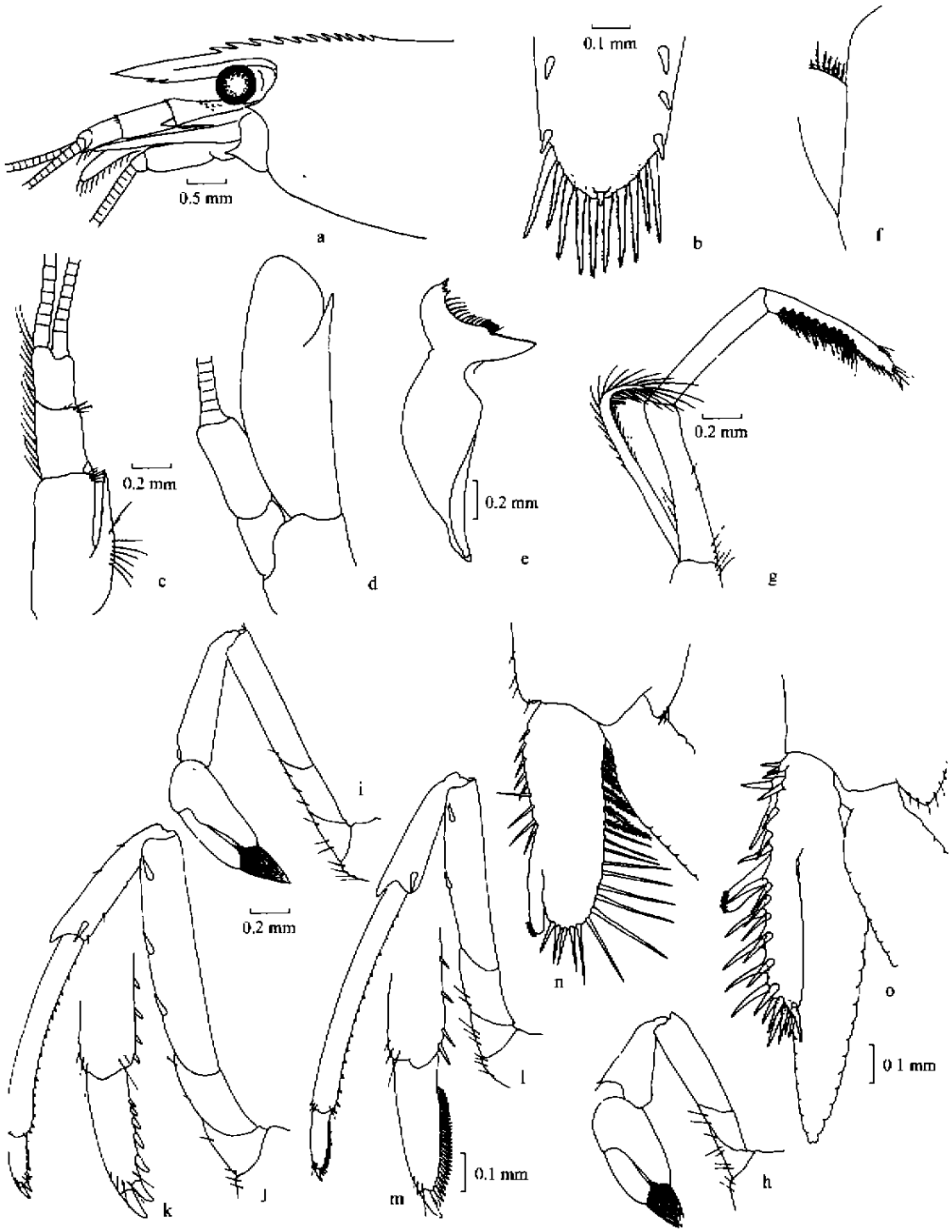

图1 昆明米虾，新种 *Caridina kunmingensis* Wang *et* Liang, sp.nov.

a. 头胸部前端、侧面观(anterior portion of cephalothorax, lateral view)；b. 尾节末部，背面观(terminal portion of telson, dorsal view)；c. 第1触角(antennule)；d. 第2触角(antenna)；e. 大颚(mandible)；f. 第1颚足内肢(endopod of 1st maxilliped)；g. 第3颚足(3rd maxilliped)；h. 第1步足(1st peraeopod)；i. 第2步足(2nd peraeopod)；j. 第3步足(3rd peraeopod)；k. 第3步足指节放大(dactylus of 3rd peraeopod, enlarged)；l. 第5步足(5th peraeopod)；m. 第5步足指节放大(dactylus of 5th peraeopod, enlarged)；n. 雄性第1腹肢内肢(endopod of the male 1st pleopod)；o. 第2腹肢雄附肢(appendix masculina of the male 2nd pleoped)。

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模式标本：正模 ♂（83－12－1），体长 17 mm。保存在云南大学。副模 3♂♂，4♀♀，体长 17～22（携卵的 19～21）mm。卵径为 0.92～0.93 mm × 1.29－1.35 mm。

产地：云南昆明安宁温泉。

比较：新种与石林米虾 *Caridina shilinica* Liang *et* Cai，2000 相似，但前者：①额角较短；②前两对步足腕节与螯均较短粗；③第 2 对步足腕节稍短于长节；④雄性第 1 腹肢内肢基部宽而末端窄（后者末端亦宽）；⑤雄附肢的刺大而数少；⑥第 1 颚足的内肢外末角圆；⑦第 3 颚足末节约等于末 3 节等特征均不同于后者。

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A New Species of *Caridina* from Yunnan, China (Decapoda: Caridea: Atyidae)

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Abstract: The present paper deals with a new species of *Caridina* collected from Kunming, Yunnan Province in 1983.

***Caridina kunmingensis* Wang *et* Liang, sp. nov.**

Rostrum reaches to the extremity of 2nd segment of the antennular peduncle. The dorsal border bears 11－19 teeth, 6－9 of which are situated on the carapace behind orbital margin. The ventral border bears 2－7 teeth. Ultimate segment of 3rd maxilliped is longer than penultimate segment, pemultimate segment and antepenultimate segment are the same in length.

Carpus of lst leg is 1.6－1.8 times as long as wide. Chela is 2－2.1 times as long as wide. Carpus of 2nd leg is 4－4.6 times as long as wide, chela is 2.3－2.6 times as long as wide. Propodus of 3rd leg is 2.6－3.7 times as long as dactylus, which bears 6－7 spinules. Propodus of 5th leg is 3.4－4.5 times as long as dactylus, which bears 29－32 spinules.

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Two New Species of the Anthomyiidae From Yunnan Province, China (Diptera: Anthomyiidae)

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Abstract: The present paper deals with two new species of the family Anthomyiidae from Yunnan Province, China, namely *Delia nigriabdominis* sp.nov. and *Chirosia fortipispatula* sp.nov. All the type specimens are deposited in Institute of Entomology, Shenyang Normal University, Shenyang.

Key words: Diptera; Anthomyiidae; *Delia*; *Chirosia*; New species

Anthomyiidae has been recorded 612 species in China. Now, after researching the specimens collected from Yunnan Province by Health and Anti-epidemic Station of Yunnan Province in recent years, two new species are reported as follows:

1 *Delia nigriabdominis* sp.nov. (Figs.1 - 4)

♂ Length of body 5.0 mm. Eyes bare and subholoptic; frons about as wide as anterior ocellus; interfrontalia black, narrower than parafrontalia; with a pair of distinct *if*, 10 pairs of inclinate *ori*, but no *ors*; parafrontaliae and parafacialiae dark brown in ground color with gray-yellow pollinosity; parafacialia slightly wider than width of antenna; antennae black, A3 about 1.5 times as long as wide; arista short plumose, most hairs of arista equal to 1/2 width of antenna, or even longer than it; epistoma about protruding from frontal angle in profile; gena with up-curved peristomal setae in 3 rows; occiput without setulae on upper part below postocular row of setulae; genal-height about 2/11 of eye-height; haustellum with prementum blackish and pollinose; palpi dark brown.

Thorax. Ground color blackish and gray-brown in pollinosity; hairs of body long and dense, mesonotum when viewed from behind with rather distinct 5 vittae;

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Endopod of 1st male pleopod is ovate. The proximal half of the outer margin bears long plumose setae, and the distal half is armed with longer spinules. The appendix masculina of 2nd pleopod is rod-shaped, and bears many large spines in inner margin.

Remarks: The present new species closely allied to *Caridina shilinica* Liang *et* Cai, 2000, but differs from the latter in following features: ①rostrum is shorter; ②carpus and chela of 1st and 2nd legs are shorter and thicker; ③ carpus of 2nd leg is shorter than merus; ④ultimate segment of 3nd maxilliped is longer than antepenultimate segment; ⑤the outer-distal angle of endopod of 1st maxilliped is round; ⑥the thorns of appendix masculina are larger and fewer; ⑦the shape and structure of endopod of 1st male pleopod and appendix masculina are different.

Key words: Atyidae; *Caridina*; New species